

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Original) A composition comprising a non-covalent association complex of:
  - a) a positively-charged backbone; and
  - b) at least two members selected from the group consisting of:
    - i) a first negatively-charged backbone having a plurality of attached imaging moieties;
    - ii) a second negatively-charged backbone having a plurality of attached targeting agents;
    - iii) at least one member selected from the group consisting of RNA, DNA, ribozymes, modified oligonucleotides and cDNA encoding a selected transgene;
    - iv) DNA encoding at least one persistence factor; and
    - v) a third negatively-charged backbone having a plurality of attached biological agents;wherein said association complex carries a net positive charge and at least one of said two members from group b) is selected from groups i), iii) or v).
2. (Original) A composition in accordance with claim 1, wherein said biological agent is a therapeutic agent.
3. (Original) A composition in accordance with claim 2, wherein said therapeutic agent is selected from the group consisting of VEGF, botulinum toxin, a blocker of VEGF, and insulin.

4. (Original) A composition in accordance with claim 1, wherein said biological agent is a cosmeceutical agent.

5. (Original) A composition in accordance with claim 4, wherein said cosmeceutical agent is Epidermal growth factor.

6. (Original) A composition in accordance with claim 1, comprising at least three members selected from groups i) through v).

7. (Original) A composition in accordance with claim 1, comprising at least one member from each of groups i), ii), iii) and iv).

8. (Original) A composition in accordance with claim 1, comprising at least one member from each of groups i) and ii).

9. (Original) A composition in accordance with claim 1, comprising at least one member from each of groups ii), iii) and iv).

10. (Original) A composition in accordance with claim 1, wherein said positively-charged backbone has a length of from about 1 to 4 times the combined lengths of said members from group b).

11. (Original) A composition in accordance with claim 1, wherein said positively-charged backbone comprises a polymer having attached positively charged branching groups.

12. (Currently amended) A composition in accordance with claim 11, wherein said polymer is a peptide and said positively charged branching groups are selected from the group consisting of  $-(\text{gly})_n\text{-arg-arg-arg-arg-arg-arg-arg}$  (SEQ ID NO:9), HIV-TAT and fragments thereof, wherein the subscript  $n$  is an integer of from 0 to 20.

13. (Original) A composition in accordance with claim 12, wherein  $n$  is an integer of from 0 to 8.

14. (Original) A composition in accordance with claim 12, wherein  $n$  is an integer of from 2 to 5.

15. (Currently amended) A composition in accordance with claim 12, wherein said HIV-TAT fragment has the formula  $(\text{gly})_p\text{-RGRKKRRQRRR-(gly)}_q$   
 $(\text{gly})_p\text{-RGRDDRRQRRR-(gly)}_q$  (SEQ ID NO:19) or  $(\text{gly})_p\text{-YGRKKRRQRRR-(gly)}_q$  (SEQ ID NO:20), wherein the subscripts  $p$  and  $q$  are each independently integers of from 0 to 20, and said HIV-TAT fragment is attached to said positively charged backbone via either the C-terminus or the N-terminus.

16. (Original) A composition in accordance with claim 15, wherein the subscripts  $p$  and  $q$  are each independently integers of from 0 to 8.

17. (Original) A composition in accordance with claim 15, wherein the subscripts  $p$  and  $q$  are each independently integers of from 2 to 5.

18. (Currently amended) A composition in accordance with claim 11, wherein said polymer is a polylysine and said positively charged branching groups are attached to the lysine sidechain amino groups and are selected from the group consisting of  $-\text{gly-gly-gly-arg-arg-arg-arg-arg-arg}$  (SEQ ID NO:1) and HIV-TAT.

19. (Original) A composition comprising a non-covalent association complex of a positively-charged backbone having at least one attached efficiency group and at least one nucleic acid member selected from the group consisting of RNA, DNA, ribozymes, modified oligonucleotides and cDNA encoding a selected transgene.

20. (Original) A composition in accordance with claim 19, wherein said positively charged backbone is polylysine.

21. (Currently amended) A composition in accordance with claim 19, wherein said efficiency group is selected from the group consisting of  $(\text{Gly})_{n1}-(\text{Arg})_{n2}$  (SEQ ID NOS:2-7), wherein the subscript  $n1$  is an integer of from 3 to about 5, and the subscript  $n2$  is an odd integer of from about 7 to about 17, and TAT domains.

22. (Currently amended) A composition in accordance with claim 19, wherein said positively charged backbone having at least one attached efficiency group is a 150,000 to 300,000 polylysine backbone having a plurality of attached  $\text{Gly}_3\text{Arg}_7$  (SEQ ID NO:1) groups wherein the degree of lysine saturation is from about 5% to about 30%.

23. (Original) A composition in accordance with claim 19, wherein said nucleic acid member is cDNA encoding a selected transgene.

24. (Original) A composition in accordance with claim 19, wherein said nucleic acid member is part of a plasmid that expresses a detectable product.

25. (Original) A composition in accordance with claim 24, wherein said detectable product is a fluorescent protein.

26. (Original) A composition in accordance with claim 24, wherein said detectable product is a blue fluorescent protein.

27. (Original) A composition in accordance with claim 24, wherein said plasmid further comprises a CMV promoter.

28. (Original) A method for delivery of a biological agent to a cell surface in a subject, said method comprising administering to said subject a composition comprising:

- (a) a positively charged backbone;
- (b) at least one biological agent selected from the group consisting of:
  - (i) a first negatively charged backbone having a plurality of attached imaging moieties;
  - (ii) at least one member selected from the group consisting of RNA, DNA, ribozymes, modified oligonucleotides and cDNA encoding a selected transgene; and
  - (iii) a third negatively charged backbone having a plurality of attached therapeutic agents; and
- (c) a second negatively charged backbone having a plurality of attached targeting agents;

wherein said composition is a non-covalent association complex of said positively charged backbone, said biological agent and said second negatively charged backbone having a plurality of attached targeting agents, and carries a net positive charge.

29. (Original) A method in accordance with claim 28, wherein said biological agent is an oligonucleotide or a cDNA encoding a selected transgene, and said composition further comprises DNA encoding at least one persistence factor.

30. (Original) A method in accordance with claim 28, wherein said biological agent is a first negatively charged backbone having a plurality of attached imaging moieties.

31. (Original) A method in accordance with claim 28, wherein said biological agent is a third negatively charged backbone having a plurality of attached therapeutic agents.

32. (Original) A method in accordance with claim 28, wherein said administering is intravenous.

33. (Original) A method in accordance with claim 28, wherein said administering is transdermal.

34. (Original) A method in accordance with claim 28, wherein said administering is carried out using an angioplastic balloon.

35. (Original) A method in accordance with claim 28, wherein said administering is carried out using a catheter.

36. (Original) A method in accordance with claim 28, wherein said administering is intraperitoneal.

37. (Original) A method in accordance with claim 28, wherein said composition is in a gel formulation.

38. (Original) A method for preparing a pharmaceutical composition, said method comprising combining a positively charged backbone component and at least two members selected from the group consisting of

- i) a first negatively-charged backbone having a plurality of attached imaging moieties;
- ii) a second negatively-charged backbone having a plurality of attached targeting agents;

iii) at least member selected from the group consisting of RNA, DNA, ribozymes, modified oligonucleotides and cDNA encoding a selected transgene;

iv) DNA encoding at least one persistence factor; and

v) a third negatively-charged backbone having a plurality of attached therapeutic agents;

with a pharmaceutically acceptable carrier to form a non-covalent association complex having a net positive charge, with the proviso that at least one of said two members from groups i) through v) is selected from groups i), iii) or v).

**39. (Original)** A kit for formulating a pharmaceutical delivery composition, said kit comprising a positively charged backbone component and at least two members selected from the group consisting of

i) a first negatively-charged backbone having a plurality of attached imaging moieties;

ii) a second negatively-charged backbone having a plurality of attached targeting agents;

iii) at least one member selected from the group consisting of RNA, DNA, ribozymes, modified oligonucleotides and cDNA encoding a selected transgene;

iv) DNA encoding at least one persistence factor; and

v) a third negatively-charged backbone having a plurality of attached therapeutic agents;

and instructions for preparing said pharmaceutical delivery composition.